

VULTUROPS FLORIDENSIS, A NEW MEMBER OF THE  
PSOCID SUBFAMILY VULTUROPINÆ FROM THE  
UNITED STATES.<sup>1</sup>

BY G. H. CORBETT AND E. HARGREAVES,  
Carnegie Students, Bussey Institution, Harvard University.

The subfamily Vulturopinæ was erected by C. H. T. Townsend in 1912 to include a very peculiar member of the Order Corrodentia from Peru.<sup>2</sup> The type species, *Vulturops termitorum*, was found in the covered runways of a species of *Hamitermes* at Piura in northern Peru.

Recently, on examining some Aleurodidæ taken from an orange tree at Orlando, Fla., on October 1, 1914, we were very much surprised to find with them one adult specimen which is very closely related to the Peruvian form. The North American species is very similar to *V. termitorum*, but differs in wing venuration as well as in other characters and evidently represents a distinct species of the same genus.

*Vulturops floridensis* sp. nov

The insect as a whole is dark brown in color, the thorax and head being darker than the abdomen, and is about 1.6 mm. in length.

*Wings* (fig. 1). Only one pair present. They are somewhat elliptical, 1 mm. in length, about two and a half times longer than broad; for comparison, a reproduction of the wing of *V. termitorum* is given (fig. 2). On the dorsal surface chiefly along the veins are structures resembling spine bases, although there were no traces of the spines themselves. They also occur to some extent on the ventral surface. The wing-veins are very prominent, and are accompanied alongside by areas which are probably blood sinuses (shaded in figure).

*Legs* (fig. 3). The hind legs are about  $1\frac{1}{2}$  times the length of the others, the coxæ, femora, tibiæ and first tarsal segment, being each respectively much longer (for comparison, see figs. 4, 5, 7). The tibiæ exhibit a kind of pseudosegmentation, each division being very finely striated longitudinally. This is also evident in the first tarsal segments (fig. 6). On the hind tibiæ are three strong spines which are absent in the two anterior pairs (fig. 5). The second and third tarsal segments are clothed with very fine hairs. The tarsi terminate in a pair of sharp, toothed claws.

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<sup>2</sup> Entom. News, Vol. 23, pp. 266-269. (1912.)

*Antennæ* (fig. 8). Only the basal portion is described, as the remainder was missing. The first segment is broader than long; the second longer than broad, constricted at the base and, in addition to spines, bears a group of sense organs of the Hicksonian type. One of these is shown greatly enlarged in fig. 9. The remaining segments show pseudosegmentation, and bear very long spines.

*Eyes* (fig. 10). Compound, with 23 facets.

*Mandibles* (fig. 11). Very large and heavily chitinised.

*Maxillae* (fig. 12). Chitinous rod-like structures, concave on the inner side towards the distal end, and terminating in three pairs of processes.

*Maxillary palpi* (fig. 13). Consist of four segments, the 4th being flattened and expanded towards the apex.

*Abdomen*. Globose, about half the length of the entire body, thinly chitinised, and bears long slender spines. On the venter towards the apex is a sac-like protrusion which is a little more heavily chitinised than the rest, and bears long spines (fig. 14). Inside the sac towards the base is a thick strand which may be muscle, or, being a potash preparation, a structure for the attachment of muscles.

#### EXPLANATION OF PLATE.

1. *Vulturops floridensis* sp. nov., left wing from above.
2. *Vulturops termitorum* Townsend, left wing from above.
3. *Vulturops floridensis* sp. nov., anterior leg (coxa not shown).
- 4a. *Vulturops floridensis* sp. nov., coxa of front leg.
- 4b. *Vulturops floridensis* sp. nov. coxa of hind leg.
- 5a. *Vulturops floridensis* sp. nov., tibia of front leg.
- 5b. *Vulturops floridensis* sp. nov., tibia of hind leg. (Note the three large spines, absent in 5a.)
6. *Vulturops floridensis* sp. nov., tarsus of front leg. (Note pseudosegmentation, fine striations, toothed claws, and the fine hairs on the second and third segments.)
- 7a. *Vulturops floridensis* sp. nov., first tarsal segment of front leg.
- 7b. *Vulturops floridensis* sp. nov., first tarsal segment of hind leg.
8. *Vulturops floridensis* sp. nov., base of right antenna, ventral view. (Note pseudosegmentation, sense organs on the second segment, and long spines.)
9. *Vulturops floridensis* sp. nov., sense organ greatly enlarged.
10. *Vulturops floridensis* sp. nov., eye.
11. *Vulturops floridensis* sp. nov., left mandible, ventral view.
12. *Vulturops floridensis* sp. nov., left maxilla, ventral view.
13. *Vulturops floridensis* sp. nov., left maxillary palpus, ventral view.
14. *Vulturops floridensis* sp. nov., sac-shaped protrusion on ventral side of abdomen.

All figures drawn with camera lucida by E. Hargreaves.